

REMARKS/ARGUMENTS

The Office Action dated December 14, 2004, has been carefully reviewed and the foregoing amendments to the application have been made in consequence thereof. Claims 1-6 have been amended in order to advance the prosecution of this application. Claims 1-8 remain active in this application.

The Examiner rejected claims 1-8 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 1-6 have been amended to set forth structural and chemical characteristics of the nonwoven membrane, as described on pages 8-10 of the specification, as suggested by the Examiner.

The Examiner rejected claim 1 under 35 U.S.C. 112 because it is not clear if applicants are defining the term conductive by the terms in parenthesis or if the article has all the recited properties. Claim 1 has been amended to positively recite the limitations in the claim, instead of using parenthesis, as suggested by the Examiner.

The Examiner rejected claims 1-8 under 35 U.S.C. 112, first paragraph, because the specification does not reasonably provide enablement for the nonwoven membrane defined by the specific desired property of electrical conductivity. The Examiner indicates that the applicants are attempting to obtain patent protection on a final product made of a non-existent process that may be made some day in the future, but only provides guidance on how to make the final product by a specifically disclosed process. Applicants assert that the present invention is a Divisional Application of United States Patent Application Serial No. 09/793,797 filed on February 22, 2001, which has issued on October 5, 2004 as United States Patent No. 6,800,155. Claims 1-8 of patent 6,800,155 teach a method of fabricating a conductive polymer membrane article. The

present invention teaches the conductive polymer membrane article. The specification for the present invention is the same as that for patent 6,800,155. Applicants have amended claims 1-6 to more particularly point out the membrane article, and Applicants assert that the specification, particularly pages 8-11, provides enablement for one of ordinary skill in the art that is reasonably commensurate in scope with the properties delineated in amended claims 1-6 and claims 7 and 8.

The Examiner rejected claims 1-2 and 7 under 35 U.S.C. 102(e) as being anticipated by *Kilden et al.* (US 6,127,033). Claims 1 and 2 have been amended, and claim 7 depends on claim 1.

Amended claim 1 teaches a polymer solution having a conductive polymer and conducting nanoparticles, the group from which the solution is selected, and the group from which the conductive polymer is selected, as described, for example, in the specification on page 8 lines 1-12.

Amended claim 2 depends on amended claim 1, and teaches the polymer solution having a photo-reactive dye, and the group from which the dye is selected, as described, for example, in the specification on page 9, lines 7-15.

Kilden does not use or add conductive nanoparticles, nor does *Kilden* teach photo-reactive dyes as taught by Applicants.

The Examiner rejected claim 3 under 35 U.S.C. 102(e) as being anticipated by *Kilden et al.* Claim 3 has been amended to be dependent on amended claims 1, 2 and 4, where amended claim 4 describes a photoelectric membrane. Claim 3, as amended, is not disclosed nor taught by *Kilden et al.*

The Examiner rejected claims 4 and 6 under 35 U.S.C. 103(a) as being unpatentable over *Kilden et al.* in view of *Angelopoulos et al.* (US 5,997,773). Claim 4 has been amended and is

dependent on amended claims 1 and 2. Claim 6 has been amended to be dependent on amended claims 1 and 2. Amended claim 6 teaches the conductive polymer membrane of amended claims 1 and 2, and further includes a conducting polymer in the polymer fibers. *Kilden et al.* does not disclose conductive nanoparticles or photo-reactive dyes. The teachings of *Angelopulos et al.* apply to corrosion protection, and thus does not teach photo-reactive dyes.

The teachings of amended claims 4 and 6, which include the teachings of amended claims 1 and 2 would not be obvious over *Kilden et al.* in view of *Angelopulos et al.*

The Examiner rejected claims 5 and 8 under 35 U.S.C. 103(a) as being unpatentable over *Kilden et al.* and further in view of *Angelopulos et al.* and *Baughman et al.* (US 6,555,945). Claim 5 has been amended to be dependent on amended claim 1. Claim 8 is dependent on amended claim 1. Amended claim 5 describes the conductive polymer membrane of amended claims 1 and 2 and further includes conducting nanoparticles embedded in the polymer fibers.

Baughman et al. teach making an actuator, which involves teachings that are very different from Applicants' teachings. An actuator is very different than Applicants' membrane. *Baughman et al.* use carbon nanotubes to make the actuator. Applicants use carbon nanotubes, not for actuator purposes, but as an additional compound in which to convey more conductance through Applicants' membrane. *Baughman et al.* do not mention photo-reactive materials.

The teachings of *Kilden et al.* in view of *Angelopulos et al.* and further in view of *Baughman et al.* would not render Applicants' invention, as described in amended claims 1-6 and claims 7 and 8, obvious.

In view of the foregoing amendments and remarks, it is believed that Claims 1-8 in this application are allowable and Notice to that effect is respectfully solicited.

Should the Examiner wish to contact Applicants' attorney regarding this application, the Examiner is respectfully invited to do so by calling or writing the undersigned in the Office of Counsel, U.S. Army Soldier Systems Center, Natick, MA 01760 at (508) 233-4510.

Respectfully submitted,

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Date

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